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ABSTRACT

This paper takes the position that toys can significantly modify children's behavior and that considerable care needs to go into the decisions one makes when buying a toy. Toys are regarded as educational aids and sources of potential learning. A given toy can provide a variety of lessons. Such lessons include: (1) learning about the various specific attributes of an object such as its texture, color, shape, weight, taste, etc.: (2) learning about objects as a whole and about dimensions of objects (uses, proportions, etc.): (3) learning about interpersonal relationships through the involvement of other persons in toy play: and (4) coordination and body-concept learning. Issues to be aware of in choosing toys are the esthetics of the toy, whether it is excessively realistic (which may result in reduced imagination), the degree of feedback from operation of the toy, the virtues of self-constructed as opposed to ready-made toys, the importance of emphasizing process as opposed to the possession of toys, and the virtues of durable as opposed to disposable toys. Other factors to consider are: a toy's compatibility (size, design, etc.) with other toys, and safety. (Author/SS)

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Shopping for Toys: The Assessment of a Toy's Value

(Paper presented at the Canadian Home Economics Association National Conference, St. John's, Newfoundland, July 4, 1979).

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I would like to begin this paper by quoting a brief excerpt from a brochure scheduled to be published by a thriving local company.

> Thurs. July 5, 1984
>
> A young couple, the female obviously soon to deliver a child, enter a parenting consultant's office and request that an individualized IMPACT[1] kit be prepared for them and their expected child. They are given a sheet of paper on which they are asked to select (in rank order) those interests, values, competencies, etc. which they wish their child to possess. They are then asked to supply additional information including their ages, income and education levels; the age and sex of each child they already have as well as the sex of the expected child and the educational and professional aspirations that they hold for their soon to be born infant. Once completed, this information is fed into the company computer. Shortly, the parents are given a printout listing the types and names of various toys grouped and organized as to the optimal time and order of their presentation. The parents are also given detailed descriptions of ways in which the toys might be played with. This having been completed, they are informed that for an additional charge similar lists each based on a subsequent interview and child assessment will be available at six month intervals until the child enters formal schooling. The parents leave the office confident that they have given their expected child a good start in life.

While this brief scenario and the service that it depicts, exist only in the mind of the author, much of the knowledge upon which such a service might be based, already exists. One might indeed propose that by the 1984 date given, an IMPACT or similar kit could be purchased.

This episode was offered because it gives the reader a perspective on a number of aspects of the nature and potential impact of toys and play materials.

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[1] IMPACT is the registered trade mark for the Associated Services for Professional Instruction, Rearing and Education Inc. of St. John's, Newfoundland and is an acronym for their Instructional Materials for Play and Child Teaching Kit.

JUL 3 1980

In reality, toys obviously cannot and do not totally determine what a child will become. The episode was intended to illustrate that toys do, however, have an impact greater than is currently realized and a very significant, albeit only partially realized potential (Jeffery, 1977a; 1979a; 1979b). This paper is intended to alert you to the developmental and educational value that toys have and further, to hopefully convince you that considerable care needs to go into the decisions one makes when buying a toy.

(a) A Contemporary Perspective

In order to appreciate the overall topic of children's toys, a few brief comments on the cultural and societal perspective from which we view toys are useful. Webster's dictionary (1964) recently defined a toy as "a plaything for children; a bauble; a thing for amusement and of no real value; a trifling object" (p. 884)[2]. This perspective of a toy as a "trifling object" apparently has its roots in the Puritan origins of our society which dictate that work comes first. Because work and play are regarded as falling at opposite ends of a continuum (Yawkey and Silvern, 1977) and because toys are obviously associated with play, toys unfortunately are typically regarded as being trivial and are thus readily overlooked and not paid serious attention. This view is obviously not shared by the author. While toys of and by themselves have little proven ability to teach given specific and preselected lessons, they do have the ability to significantly modify behaviour.

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[2] A toy is defined by the author as any object or material, whether commercially designed for the purpose or not, which a child is either offered or allowed to use and which the child willingly uses.

(b) Education and Toys

The above statement raises the confusing and at times controversial issue of the educational value of toys and more specifically the usefulness of those toys marketed as "educational." If one sets the criteria that a child's use of a toy by itself and without adult or peer interaction, will result in that child learning a given lesson, then one finds evidence of only a very small number of toys that actually teach (see Olsen, 1970; Quilitch and Risley, 1973; Hutt, 1976). What is being suggested is that for the most part, toys called "educational" are, in the strictest sense of the word mislabeled and the consumer is being misled (Singer, 1973; Quilitch, 1974). If on the other hand, toys are regarded as educational aids and sources of potential experiences and learning[3] then a considerably different perspective on toys is possible.

A toy is an object to be used and in being used it is experienced and discovered. Like almost every object, it will have a probable range of uses that are suggested by its shape, detail, size, weight, etc. (Maclennan, 1977). In some cases the design and nature of a toy is very specific or representative of a real (i.e., miniaturized) object while in others it is very undefined as to its uses. Objects in this latter category (i.e., undefined or amorphous) can, depending on the age and background of the child and the context (i.e., other toys present, etc.) suggest few if any uses (i.e., a blanket or piece of cloth) or alternatively be similarly undefined but suggestive of a wide variety of uses (i.e., plasticene, (without molds!) or a cardboard box). The particular

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[3] This view is also accepted by several authors including for example Montessori (1947), Berieter (1966), Allen (1966), Buist and Schulman (1969), Olson (1970), Kephart (1971), Zimmerman and Calovini (1971), Stone and Church (1973), Vandenhazel (1976), Maclennon (1977) and Yawkey and Silvern (1977).

uses of both unspecific and representational toys obviously depend both upon what the user brings to the toy and what the toy, by its nature suggests. While both the child and the toy are contributers (albeit to varying degrees) the toy is the variable which is more easily modified and controlled.[4]

The educational value of a toy lies in the activities or uses the toy is likely to suggest. By suggesting or perhaps more accurately delimiting a range of uses, a toy structures the child's play. Because much of a child's learning takes place through his or her play (Caplan and Caplan, 1974; Garvey, 1977; Maclennan, 1977; Yawkey and Silvern, 1977) the toy or toys he or she is offered or allowed to play with have a significant educational value and might even be considered as akin to curriculum materials.

(c) Lessons From Toys

Often a variety of lessons typically falling into one or more of several categories can be gained from a given toy. A number of the more common of these categories are listed below.

i. Specific Detail Lessons: Learning in this category involves the child becoming aware of and hence potentially learning about the various specific attributes of an object such as its texture, colour, shape, weight, taste, etc. (White, 1975). This type of learning is most frequently though not exclusively found in infants and young children and is usually referred to as being of a primarily sensory or sensory-motor nature. It is through the discovering and learning of such detail that the child establishes the foundations necessary

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[4] An observation often made by the author but rarely if ever discussed in the literature relates to the fact that play, particularly in younger children, virtually always makes use of some object. Most of the literature on play focuses only on the activity being performed and fails to consider the importance of the interaction and influence created by the object or more accurately some of its specific attributes.

for much of his or her subsequent learning and thinking (Piaget and Inhelder, 1969; Maclennan, 1977). An able child exposed to a rich sensory environment will absorb a tremendous amount of the incidental (often seemingly insignificant by adult standards) detail found in that environment.

ii. Learning About Objects Through Toys: A child having passed infancy, is probably already familiar with much of the discreet detail type of information found in an object. This child, like the adult, is now likely to learn about the object more as a whole. When, for example, a three year old is offered a representational toy such as a miniature car or electric beater, he or she will be likely to learn about uses, proportions, etc. of the object. The child will often already be familiar with many of the types or categories of detail found on the object such as its colour, texture, etc.

When the child at this age is presented with such toys, he or she also learns about what Garvey (1977) refers to as the "various action patterns compatible with each object" (p. 47), i.e., the various actions both suggested directly by the object (i.e., sweeping or buttoning) as well as the other aspects of movement required to use the object such as balance, eye-hand co-ordination, etc. These latter features of toys are discussed at greater length below.

iii. Toys and Interpersonal Relationships: Another category of learning, closely related to nature of the object has its basis in the interpersonal relationships necessary to use the object. Such toys as see-saws, baseball gloves and most table games obviously demand the involvement of another person. Interpersonal relationships (or the lack of them!) can clearly be facilitated by offered objects. The above mentioned toys clearly demand that the child be able to obtain and maintain the involvement of a partner and also that he or she work through the delicate balance of cooperation and competition typically

encouraged by their use. Similarly selected toys can foster equality and sharing between children (i.e., building blocks too large to be moved by one child but easily used by two (Caplan and Caplan, 1974) or leader/follower (i.e., parent/child) relationships such as are typically found when for example parent offers a child a set of construction blocks or an electric train or slot car set which is too difficult for the child to use alone and hence require both the permission and co-operation of a more mature person before it can be played with. In a similar way a child can be offered a set of toys which clearly encourage solitary and typically quiet play (i.e., puzzles, books, sewing cards and age appropriate assembly toys).

Within this general category, one might also consider the many toys and play objects which function as dramatic props. Many toys ranging from old clothes to guns, housekeeping utensils, miniature construction equipment and doctors and nurses kits can readily be seen to function in this way. Such toys while obviously offering information about the real object they represent and offering an opportunity for the child to work through various experiences, also provide a jumping off point for many interesting and rich interpersonal relationships.

It is interesting to note that a significant portion of parental disciplining (a very major interpersonal learning situation!) is very much and very often directly influenced by the nature of objects, often including but by no means exclusively, toys. A parent often finds it necessary to discipline a child because the child is either attracted to or misuses a particular object. It should be appreciated that while the child's actions are typically the principal focus of attention, these actions are often in part a consequence

of the presence and nature of a particular object. The object suggests, to the child, an action deemed inappropriate by the parent and hence precipitates the need for discipline.

The above discussion in no way suggests that a parent should remove all "tempting" objects from the reach of the child. The child typically must learn about the value of objects, property rights, safety, etc. These lessons are learned by example, instruction, and obviously by discipline. The parent thus can design an environment or in other words "set the stage" by presenting selected objects which are likely to present the opportunity for the child to learn about them through the adult's own behaviour, his or her tuition and if necessary his or her discipline.

A toy, or more accurately a child's set of toys, thus both offers the child knowledge and information about the material and nature of the objects presented and also potentially provides (or deprives) that child of the opportunity to experience situations and interactions directly suggested or indirectly encouraged by those objects.[5]

iv. Control. Co-ordination and Body-Concept Learning: Many adults are aware of the learning opportunities provided by supplying children with materials which encourage them to discover and rehearse the uses of their bodies. Such materials run the gamut from mobiles which twist and turn when the child moves through monkey bars, puzzles and building blocks to objects requiring fine muscle coordination like needlework and Meccanno type assembly kits. While many of these objects obviously encourage the child in directions other than just fine or gross muscle coordination (i.e., self-expression, creativity, etc.)

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[5] For a discussion of the idea of a "Toy Curriculum" see Jeffery (1979a: 1979b)

they also have the interesting feature that they encourage the child to master, through repetition or rehearsal often very similar activities.[6] Even though such practice is beneficial to the child and a necessary component of development, it would be very unlikely to occur in other than a play context; as, like adults, children rarely willingly do things because they are "good" for them.

The usefulness and necessity of such activity and co-ordination enhancing toys must be appreciated both within a developmental and culture and time framework.

Newell Kephart (1960), an expert on learning disabled children, has suggested that

> ...each advance in our technical development surrounds us with machines and devices which make increased demands on our ability to alter behavior. Each new device carries with it a behavior pattern necessitated by its use and hence a variation of behavior depending on whether it is present in a situation or not. As a result, countless new types of behavior are demanded of us and countless modifications of response are dictated by the devices surrounding us at any moment. (p. 14)

Kephart goes on to point out that devices, such as television, for example, have the effect of decreasing the amount of physical activity a child performs, hence potentially impairing and/or delaying certain aspects of that child's development. If one takes into account the changes in a child's environment which have occurred in recent years such as apartment living, reduced play space, fewer climable trees, etc., one can appreciate the increasingly important role played by objects which replace the previous opportunities that were available for the child to climb, crawl through, swing on, etc.

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[6] For additional information on the increasing use of such toys with handicapped children see Jeffery, 1977c; 1979a;b;d;e)

Toys of a manipulative nature can also influence how the child perceives and feels about him or herself, i.e., their self-concepts. An object suggests an activity and the child sets out to perform that activity. Sometimes the child succeeds and sometimes he or she fails. A child's success or failure obviously depends on the match between the object and that child's developmental level, previous experience, effort and many other factors. While what determines this outcome is indeed very complex, the effects of that outcome on the child's subsequent development can be of key importance especially during the young and formative years.[7]

Children need to be active and learn both about themselves and the uses and limitations of their bodies through their activities. While they are typically willing and ready to do this, the objects and materials which suggest the activities and which they need to use, manipulate and master, need be present.

v. Miscellaneous Lessons: Toys can be influential in a range of subtle and quite significant ways. Because these influences do not lend themselves to any one more general category, they are individually considered below.

(1) Esthetics and Toys: While the bases of adults' esthetic decisions are indeed complex, one influential factor is familiarity. An adult, like a child, often chooses materials, colours, designs, etc. on the basis of what he is used to. One might also go so far as to state that the opposite, namely that we often do not even notice or consider something which is unfamiliar, is

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[7] This reality, especially in the case of handicapped children, is appreciated by a number of agencies, such as Aidis Trust (Lodbourne Farmhouse, Lodbourne, Gillingham, Dorset, England) and toy libraries (see Jeffery 1977c, 1979b, 1979c) throughout the world.

also true. When we offer an object to a child we are also offering that child and example of the particular design or style, colour, material etc. exemplified in that object.

While what is being suggested may at first seem somewhat obtuse, a brief example may bring the situation into focus. Consider the child who is given almost exclusively plastic toys which are brightly (even gaudily) coloured and decorated and which, in their development have had little attention paid to them in terms of the principles of good design. One might consider, for example, a currently produced multicoloured, star-covered telephone with wheels and eyes that move. A child given a quantity of such similarly manufactured toys will certainly become very familiar with the types of designs, materials, colours, etc. offered and quite conceivably may come to prefer them! By contrast consider the esthetic lessons offered by a well finished creatively designed wooden toy. The differences in terms of the lessons offered are readily apparent (Jeffery, 1978).

While my biases are readily apparent, it is not my intent to suggest simply that wood is good and plastic is bad. Rather it is intended that the reader appreciate that a toy is offering such a range of experiences and lessons and that the concerned toy purchaser (and hopefully toy manufacturer) take these into account and consider their impact on the toy's ultimate user.

(2) Excessive Reality and Reduced Imagination. A second set of subtle lessons potentially derived from toys is an indirect consequence of offering the child an excessive quantity of highly realistic play objects. Many of the, particularly mass produced, toys on the market are nearly exact copies of the real thing. At first glance this may appear highly desirable as it obviously

serves, as toys always have, to familiarize the child with the tools and ways of his or her culture. While this is in part true, an excess of such objects is not always or necessarily desirable.

The highly realistic toy (i.e., a miniaturized fire truck, C.B. radio or play oven) quickly and readily suggests to both its buyer and its ultimate user, what should be done with it. Though this is not in itself necessarily a source of concern, some concern should exist in situations where the child is offered an excessive quantity of such objects as here the child may be being encouraged in directions not intended by the parent.

A realistic toy typically has its play potential (i.e., its range of possible uses) quickly realized. In other words the child, upon receiving the toy, either already knows or quickly discovers what can be done with it and readily performs the suggested activities. Because a child typically only plays with an object as long as it suggests new or not yet mastered activities, a toy with a narrow or clearly specified range of suggested activites is often all too quickly "consumed." Such rapid consumption creates a situation wherein the child predictably soon wants more "new" toys, a state much appreciated and perhaps even encouraged by toy manufacturers but not typically much favoured by the purchasing parent.[8]

A typically brief period of play is not the only consequence of such toys. Because these toys clearly suggest or script the activities the child is likely

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[8] The would be toy-buyer is wise to try to estimate the duration of play likely to occur with a given toy. This having been done, divide the cost of the toy by the number of hours (or minutes!) of use and obtain the cost per hour of play with that toy (i.e., a $25.00 toy played with for a total of 2 hours costs $12.50/hour).

to perform,[9] they are also likely to restrict the child's imagination and creativity. What is being suggested is that toys need only a small amount of realistic detail and that by offering this, the child's fantasy is given a much freer range (Fraser, 1972; Singer, 1973; Jeffery, 1977a; 1978a).

(3) Too Much Feedback Too Soon: A special group of realistic toys are those which "operate". These toys include such things as ovens that cook, guns that shoot and miniaturized motorized vehicles. Unfortunately, these objects are typically attractive to both the child and the adult buyer. As with all toys, these too are not necessarily or always bad, however, they do have a potentially unfortuante effect on a child not developmentally ready for them. This effect relates to both consequences for the child in the event of misuse and the types of feedback the child is offered about himself as a result of using (or more accurately failing) in using the toy. You cannot burn a mudpie or blind someone with a click gun.

A toy which is "just a toy" does not give the child the same real feedback about his actions as does a real object. A child cannot fail at cutting a board with a rubber saw! A mud pie, in the eyes of the child, is almost always delicious and beautiful and something which its maker can be proud of. The view being taken and the proposition being made is that children typically gain little to foster their development by being offered miniaturized operating objects and, in fact, may suffer from excessive feedback about their not yet developed competencies by being offered objects for which they may not yet be ready and as a consequence of which they may unfairly experience themselves as failures.

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[9] Toys based on T.V. heros or shows can also readily be appreciated as falling into this category.

(4) Better Bought than Built: A large and increasing number of comtemporary toys are so perfectly made, both in terms of detailed realism and function, that would be toy makers, be they children or adults, are hard pressed to come up with so fine products. As with so many aspects of toys, this "perfection" is not in and of itself necessarily bad or undesirable. When some thought is given to the implications of this situation, however, once again, a somewhat different perspective can be attained.

Consider briefly the seemingly innocuous commercially made 'bat-wing' styled highly decorated plastic kites which are readily available to most children. This toy is highly attractive and flies extremely well with relatively little effort or skill. It would seem a near perfect object and so it is. The difficulty lies in the play value of the toy and more importantly in the experiences missed in buying rather than making such an object.

Many adults can recall their own experiences relative to kite flying. The kite had to be made! This meant searching out suitable wood (often old, [or new!] yardsticks) paper, glue, string, tail material (often old nylons) etc. When these materials were found the kite was designed and often more importantly decorated. It was not unusual for a child to invest several hours or perhaps days in this venture. All too often the first and sometimes second attempts at building proved, at least in terms of airworthiness, unsuccessful; however, you kept trying (which alone was a worthwhile outcome).

The events just outlined, from a developmental point of view, are tremendously worthwhile. The child learns a range of lessons going from negotiating with parents or neighbours for materials, to what the aerodynamics of kites are all about. If the kite flies, the satisfaction of seeing your creation in the air is evident. By contrast the commercial kite is quickly assembled and flies

well. As a toy its play value is probably realized in about one half to one hour. It is then discarded. A relatively limited "fun" or learning has occurred.

(5) The Myth of Instant Fun: The previous example also illustrates another situation in which adults have overlooked a key feature of childhood, namely, that children (as are most adults) are "process creatures." For the child enjoyment is more in doing than having. Our adult world is very much one of instant pleasure and quick and easy success. This is not the child's world. Consider a summer morning when a group of 7-10 year olds decide to play house or build a fort. A tremendous amount of effort and time will go into procuring materials, arguing over or discussing design, etc. When the "project" is completed and the game of "house" or "war" can begin, the children typically move on to something else! The joy and value in play is in the process of doing not in having. Many currently available toys, because they are bought by adults who respond to their own values and not those of the child, offer "instant fun." This is not what children, if given the choice, want or need. Such objects also, unfortunately, further foster the high consumption and waste so much a problem of our society.

(6) Disposable Toys: As was suggested above, our society has the major problems of the diminishing supplies of key commodities and the difficult disposal of waste. These problems too can be, at least in part, appreciated as having some of their roots in the toy industry and the toys we offer a child.

Many adults can no doubt recall the very common practice, found in many communities, of collecting toys at Christmas for less fortunate children. While new toys were obviously accepted, so were those which could be repaired. The willingness to accept the damaged toys has virtually disappeared as the

contemporary toy, with few exceptions, has been designed in such a way and made with materials (principally plastic) which require that when it is damaged it is disposed of.

Consider the child in this context. He or she is taught early to be a "throw away" consumer. The child is also taught the related lesson that there is no point in even trying to repair or maintain an object, throw it away if it is damaged. In today's world, and even more importantly tomorrow's, when today's child is an adult, it is very unlikely that such an extravagant life style will be possible. If disposable toys continue as the order of the day the necessity of future difficult and painful adjustments is inevitable.

(d) What is a Good Toy

The finding and deciding upon what is a good toy are by no means easy tasks. A good toy is one which firstly offers experiences you wish a child to have and secondly, is an object that the child will use. Because a child typically cannot be made to play with a toy, the toy must offer the child activities which the child enjoys and wishes to engage in. To be used it must also offer opportunities which are either new or representative of skills or knowledge the child has not already mastered. Some toys, such as stuffed animals will be used because they offer a child security and comfort, however, while these are very necessary a child will typically need and use fewer of these than of the more activity oriented toys.

Among the many other factors which need also be considered by the toy buyer are: a new toy's compatibility (i.e., size, design, etc.) with other toys, its redundancy (i.e., how many other toys the child has do the same thing) and of course its safety.

While an extensive list of the various specific factors which might be considered is beyond the scope of the paper, the interested reader is directed toward the "Toy Evaluation Guide" prepared by the author (Jeffery, 1977b) or other guides available from such sources as the Canadian Toy Testing Council (P.O. Box 6014, Station J., Ottawa, Ontario, K2A 1T1), and James Galt and Company, (Cheadle, Chesire, England).[10]

In closing, the rearing of a child is a very complex process involving much more than just the selecting and offering of toys. Toys are, however, a significant variable and offer one of the few relatively available means of altering that process. While some objection may be raised to the obvious suggestion that one can and should seek to direct the child's development in the way proposed by the scenario beginning this paper, the reality that toys do have such an influence must be appreciated. If given the choice as to who should be responsible for the rearing of your child, the toy industry, or you, the choice is obvious.

Shopping for toys can indeed require considerable thought and care but when one considers the ultimate reason for this effort, your child, it seems quite reasonable.[11]

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[10] Useful information on toys is also available through the Canadian Toy Library Association (50 Quebec Ave., Suite 1207, Toronto, Ontario, M6P 4B4), The British Toy Library Association (Seabrook House, Wylotts Manor, Darkes Lane, Potters Bar, Herts, England), and articles by the author (see Bibliography)

[11] A video tape having an aim similar to this paper has been recently prepared (see Jeffery 1978b).

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